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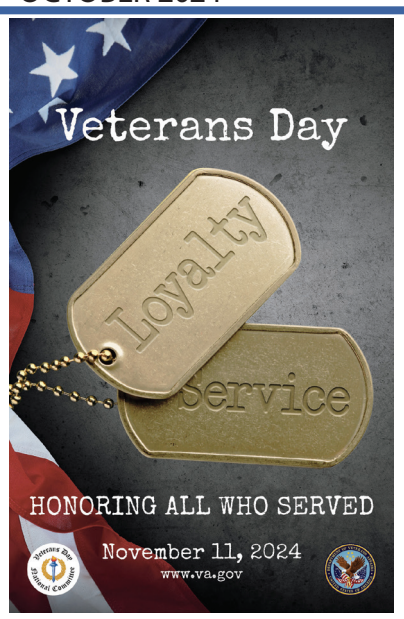
UAA Mat-Su
Home of the
Mat-Su College
Arctic Dragons

Mat-Su Monitor

OCTOBER 2024 FREE VOLUME 48 NUMBER 1



NOVEMBER 11, 2024
PUBLIC CEREMONY 2 PM
GLENN MASSAY THEATER

Capitol Christmas Tree

By Ashley Mortrud

As a tradition, a different national forest is selected each year to provide a tree for the lawn of the U.S. Capitol Building for the holidays. This year, Alaska has been selected!

See **ORNAMENTS** *page 7*

CJI: A Brazilian Jiu-Jitsu revolution

By Christian Mills-Price

The CJI. 2 million dollars on the line. 32 of the world's best grapplers. Two of the greatest female Brazilian Jiu-Jitsu (BJJ) athletes facing off. An inter-gender match between two legends of the sport. All of this was scheduled

See **JIU-JITSU** *page 9*

MatSu Food Bank Director Fred Becker holds a food box for the MSC Student Supply Stop.

Student Supply Stop

Mat-Su College Student Government had a dream. They wanted to be able to supply students in need with hope. This hope came in the form of a gift of food.

See **FOOD BOXES** *page 4*

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RockOn: A Student's Perspective at NASA's Wallops Flight Facility and Chincoteague, Virginia

By Justice A. Darby

Left to right Dr. Daniel Nichols, Justice Darby, and Liam Pavillionis in front of the Terrier-Improved Orion

Wallops Flight Facility and NASA's RockOn Workshop

Over the summer of 2024, two students and one faculty from Mat-Su College traveled to Chincoteague, Virginia to participate in NASA's RockOn workshop and RockSat program at Wallops Flight Facility. Several colleges and universities from around the United States met at Wallops Flight Facility in the construction of experiment canisters for NASA's RockOn workshop. Each university's canister consisted of several instruments ranging from accelerometers to a Geiger counter. Each experiment canister was assembled over the course of four days where the students and faculty learned how to solder wires and micro-

See **ROCK ON** *page 11*

Jim Hitchcock

By Braden Quade

The Mat-Su Monitor presents an interview with Jim Hitchcock, former adjunct professor at the Mat-Su College.

He is also known for having built the Mat-Su College cabin at the Alaska State Fair.

Jim Hitchcock in front of the sign on the MSC cabin at the 2023 Alaska State Fair.

Monitor: What class did you teach at the Mat-Su college?

J.H. : I had a log cabin building class at the Mat-Su College. In this class, the students would learn how to make a log cabin from scratch, from local Alaskan wood.

Monitor: That sounds like a pretty amazing class. It is quite useful as well! How long did you teach this class?

See **HITCHCOCK** *page 7*

Summiting Matanuska Peak

By Amber Godin

Matanuska Peak located in the Chugach mountains is a 6,093ft summit with its trailhead nestled in the Butte, AK area. People climb Lazy Mountain, climb the Butte, walk the Railroad trail as well as a few other common Alaska trail staples. But Matanuska Peak "It's a bit of a challenge," said a nonchalant Jereld Rice DVM. Knowing Dr. Rice and his love for hiking I knew I was about to sign up for more than "a bit of a challenge" when I agreed to summit this peak with a group of friends.

Nonetheless on June 15th, 2024 at 9 am on a sweltering (for a born and raised Alaskan) 75-degree day with not a cloud in the sky and not a breeze to be found, my friends and I set out to summit the Matanuska peak.

The trail is about 4 miles to the summit and gains 5,600 feet in elevation. It starts in the trees with large amounts of unrelenting mosquitoes (all the Deet bug spray in the world could not deter them) and slowly gains elevation with beautiful views of the valley through gaps in the trees. After a stream crossing it opens up into miles of meadowy valley. At this point in the trail, with little elevation, easy walking, and beautiful scenery you are already thinking "Wow! I could do this again." With the birds singing, the sun shining, and a gentle breeze whispering through wildflowers, it truly is a sight to behold and a scene of absolute beauty and serenity. The true epitome of peace and nature. This section of the trail continues for about

See **SUMMIT** *page 11*

Upcoming events:

October 23: SGC Breast Cancer Awareness PINK OFF!! Wear pink - win a prize.

October 28: Spring class schedule viewable in UAOnline.

October 31: Campus halloween Event .Mat Su Campus 4-7.

October 31: GSA Movie Glenn Massay Theater 7-9.

November 1: Spring 2025 registration begins.

November 1: Deadline to withdraw from classes.

November 8: Dominik Modlinski gallery opening, 4-6 PM. Public invited.

November 11: Veterans Day event.

November 18-19: Nature Walk events for Journey. Meet at 12:00 PM in FSM lobby.

November 28-30: campus closed for Thanksgiving.

December 5: SGC WinterWonderland Glenn Massay Theater 4-8.

December 9-12: Therapy dogs on campus.

Art Gallery:

October: Harry Banks: Then and Now. Photographs.

November: Dominik Modlinksi. Paintings.

December 6: Miniature Art Holiday Sales Event. 4-6 PM. Public invited.

Clubs, Etc. meeting times:

Bible Club: Tuesdays 3-4 FSM 106

Gamer's Club: TBA

Gay Straight Alliance LGBTQIA+ club: Wednesdays 2:30 - 3:30 FSM 106

JEDI Club: TBA

Human Services Club: TBA

Mat-Su Monitor: Wednesdays 2:30-3:30 OLD 214

Math Club: TBA

Student Government: Mondays 11:15 - 12:15 JKB 106

Robotics club: Mondays-Wednesdays 11:30 - 3:30 JKB 120

Tabletop Gaming Club: Wednesdays 2:30 -4:45 SNOD 117.

Vett Tech Club: Every other Friday 6:30 pm FMS 112A

HEALTHCARE WORKERS ARE IN DEMAND!
Many jobs require training but not a degree.
Mat-Su Health Foundation vocational scholarships can help!

MAT-SU HEALTH FOUNDATION
Apply today at healthymatsu.org

MAT-SU COLLEGE STUDENT SUPPLY STOP
Sponsored by the Mat-Su College Student Government, Mat-Su Food Bank, and Mat-Su Health Foundation

Need a quick bite? Stop by the Student Government Office (JKB 114) during office hours.

For more assistance, stop by the Mat-Su Food Bank, show your student ID, and receive a package of food.
Open Monday - Friday, 10 a.m. - 1 p.m.

Mat-Su Food Bank:
(907) 357-3769
Student Government:
(907) 745-9759
or
uaa_mscstudentgov
@alaska.edu

UA is an affirmative action/equal opportunity employer, educational institution and provider and prohibits illegal discrimination against any individual: www.alaska.edu/nondiscrimination

Mat-Su College
University of Alaska Anchorage

The Mat-Su Monitor presents this interview with Jamison Lednum: A former student (and a former student worker) from UAS who graduated in 2020. He is also the new Admissions Representative at Mat-Su College.

By Braden Quade

Jamison Lednum Admissions Representavie Mat-Su College

Monitor: Thank you for allowing yourself to be interviewed. My first question is, what inspired you to go to college in the first place?

J.L. : I've always loved education. I loved high school, especially history. When I finally graduated high school, I wanted to get a degree in history. With that degree, I wanted to be a high school history teacher. Once I was in college, however, my views of what I wanted to do as a career changed.

Monitor: What campus did you take classes at, and what was your degree in?

J.L : I took my pre-requisites at the Mat-Su College campus, and took my main classes at the UAS campus in Juneau. Even though I wanted to be a history teacher, I ended up graduating in with a Bachelor's degree in Social Science.

Monitor: Were you a student worker at all, or were you in any clubs?

J.L. : Yes I was. At UAS, I was on the student activities board, and I was a senator on the UAS Student Government

Monitor: Wow that is quite a lot of part-time work! How did you balance that and full-time college classes?

J.L. : I must admit, that it wasn't easy. Sometimes I had to choose my college work over my part-time jobs, which was difficult because I wanted to be the best I could be. I had to sometimes put my paid job(s) on the back burner so I could put my education first. My desire for a good college education won out in the end thankfully. Thank goodness my jobs at UAS were very flexible and willing to adapt to my schedule.

Monitor: What were your favorite classes you took?

J.L. : Two of my favorite classes were Western Civilization with Professor Lockwood, and East Asian Civilization by Professor Kirk, which were both taught at the Mat-Su College campus

Monitor: Were there any reasons in particular you decided to work at the Mat-Su College campus?

J.L. : I am familiar with the campus, as I took classes here for my first two years. I like how the Mat-Su campus is connected to the community, and is a great way to transfer from being a college student to entering the workforce. I also enjoy the amenities here, like the big library.

Monitor: Do you have any last words of advice for the Mat-Su College students?

J.L. : I would highly recommend getting involved with the college campus. There are many ways to get involved, whether it is with a student worker position, a student government position, getting involved with the campus newspaper, going to events, or in one of the many school clubs the campus has to offer. Make friends and study partners, and do your best to make college fun for yourself and the people around you.

Monitor: Thank you so much for your time Jamison.

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The *Mat-Su Monitor* is the student newspaper of Mat-Su College. The *Monitor* aims to report college news and serve as a forum for student writing. The *Monitor* seeks submissions of news, editorials, and short fiction from all students, staff, and faculty of Mat-Su College. All students are invited to attend the *Monitor*'s weekly meetings. Details on participating in or submitting content to the *Monitor* can be found at *https://matsu.alaska.edu/offices/student-government/student-clubs/mat-su-monitor.cshtml.*

The Mat-Su Monitor is funded by the Mat-Su College Student Government Association and our advertisers. For information on advertising in the *Monitor* contact Micah Muer at mwmuer@alaska.edu or 907-745-9758.

The opinions expressed the *Monitor* article are solely those of its authors. They do not necessarily reflect the opinions or policy of the college, its students and employees, or the wider University of Alaska system.

Business owners!

The Mat-Su Monitor is a great place to advertise your business or event. The Monitor has a wide circulation, with thousands of copies inserted in the Frontiersman and distributed throughout the Valley. We also have low rates:

Ad Size	Cost
3" by 3"	$75
5" by 5"	$125
7" by 7"	$175
Full page	$300
Full page, back	$375

Moreover, the Monitor runs relatively few ads, which ensures that your ad will stand out. Finally, advertising in the Monitor demonstrates your support for local students. For more on advertising, call 745-9758.

Voting Poll

By Beau Guss

I Asked 10 Voices In My Head Who They Will Be Voting For President in 2024.

Here's What They Said:

All voices will be unnamed for anonymity and because they are legion and therefore are many.

Voice #1

I'm voting for Kamala Harris because I enjoy hypocrisy. I like how she says one thing, but does another. It gives me very good Demagogue vibes in a manner that makes her seem like she's better than me, and I like her lack of morals. I will be voting multiple times for her.

Voice #2

I'm voting for Donald Trump. He seems like an even more racist Ronald Reagan, and I can respect that. My only wish is he would be stronger on his goal of creating The Handmaid's Tale in real life, it is a very awesome goal and I hope to see it realized.

Voice #3

WAKE UP WAKE UP
WAKE UP WAKE UP
WAKE UP WAKE UP
WAKE UP WAKE UP
THIS ISNT REAL THIS ISNT REAL THIS ISNT REAL WAKE UP WAKE UP WAKE UP WAKE UP WAKE UP

Voice #4

Personally, I plan on smoking pot and playing NBA 2k on election day, but I will be using the election as an excuse to leave school and work.

Voice #5

I'm voting for Kamala because she seems the hottest. I love listening to her, her policies are so enjoyable to look at…I mean listen to.

Voice #6

I plan on voting twice but voting for both candidates. I feel both candidates deserve my vote with how amazing they are.

Voice #7

I didn't think I'd live this long. The fact I'm still here is a miracle. I don't care.

Voice #8

I am just hoping for a Military Junta to take over. I'm sick of democracy.

Voice #9

I am just hoping for a Corporate Coup to take over. I'm sick of democracy.

Voice #10

I am voting for a third party (Worst opinion, waste of time, booooooo)

Purpose of the Student Government Council

By Anastasiia Kalmykova

The Student Government Council (SGC) exists for the purpose of bringing activities into college life. You can inspire and lead an idea yourself! Or participate in the events we host such as winter dances, Halloween parties, trick or treats, Easter egg hunting, finals snacks for the whole college campus at the end of each semester, and many more upcoming events. Share your ideas with us! One of the other things we do is support the clubs we have on campus: Gay-Straight Alliance, Tabletop Gaming club, Video Gaming club, Math club, Robotics club, Bible club, and JEDI (Justice, Equity, Diversity, and Inclusion) club. All of these clubs are open to all students that desire to participate. The main purpose of SGC is to improve and encourage campus community growth!

Student Government Body

SGC consists of an executive committee of a president, vice president, and a secretary. The SGC body consists of the executive team plus all the senators as well as club representatives! We follow the Associated Students of Mat-Su College Constitution (rules and guidelines) which you can read through if you like. You will find a copy in JKB 114, which is the Student Government Office. This document is also available online.

Current Positions: Become a Senator

Currently, we have positions available! Join the SGC by becoming a senator. Senators can manage social media such as writing reports for the school newspaper. Senators can become event coordinators and be in charge of any big events done by Student Government. Senators can be in charge of countless ideas. If you want to make a change, you are welcome to join the SGC. Start off by going to an SGC meeting (every Monday in FSM 106 at 11:00AM).

The Mat-Su College Student Supply Stop

As of this fall semester the SGC has taken on the responsibility for providing free food boxes to anyone who needs food assistance. If you are in need of a bite of food contact us at 907-745-9759 or stop by the SGC office JKB 114 or email us at uaa_mscstudentgov@alaska.edu You can also stop by the Mat-Su Food Bank, show your state or student ID, and receive a package of food. The Mat-Su Food Bank is open Monday-Friday from 10:00AM- 1:00PM at 5099 East Blue Lupine Drive. Reach out to the Mat-Su Food Bank at (907)357-3769.

Labor Unions of Modernity: Scabs The Bosses Use To Their Advantage

By Ryan K. Newman

As a nation, we have come far from our roots. From sweatshops in the 1800's, slavery, and women barely being anything besides tools in work, to the masses standing up for themselves. The brutal fight that had to happen to get here should not be understated. The fight that the AFL, the CIO, and The Knights of Labors gave to see us where we are today should not be taken for granted. Further, the deaths caused in the fight for the right to assemble should neither be forgotten, whether the Haymarket Affair, the deaths of labor leaders, or any worker who died due to the horrible conditions they were given. However, we see a poor development after the 1955 merger of the American Federation of Labor (AFL) and Congress of Industrial Organizations (CIO): monopolization and corruption of the labor union.

Instead of a union of your peers, we see a union of your peers with a bureaucrat who does not know the ails of working and merely uses their position as a form of payment, ipso facto. This would not be a problem (some may argue having the knowledge of degrees versus being without any expertise in the field) however, one poor development due to this, is essentially fear of acting when needed.

These reps will be paid regardless of if you strike and get more for what you want, or don't, so why would they risk ruining the business for you? They only represent you if you have a job, so it does not make sense to advocate for striking unless absolutely necessary. With union dues being required and the reps being foolish, they can give you "rewards" that merely make working harder and do not give more pay or more incentives (IE: Required breaks which only slow you down, as compared to cheaper prices for health insurance, greater pay, et cetera).

I am not arguing that we should have a return to the old times when there would be genuine violence, however to have someone so willing to negotiate in such foolish means does not help anyone besides two people: The Boss, and the Union Rep. Thus, if they inherently do not benefit the worker, why have them? That is nothing but a scab that takes away your right (at times) to strike, and merely gives you the false impression of being represented.

We must return to smaller, populist labor unions that will promise you rights and have invested in them. Two things must happen: Labor Unions must be smaller, and so must businesses. I am calling for one simple point: the destruction of all leviathans of labor, be it businesses or labor unions.

Submissions policy

Students are invited to submit articles and letters to the editor to matsu.monitor@alaska.edu or at https://matsu.alaska.edu/monitor. The Mat-Su Monitor will not accept anonymous submissions, though with prior arrangement articles of a sensitive nature can appear anonymously. All submissions are subject to editing and will only appear with the approval of the editor.

5 Reasons Why You Should Vote in any Election:

By Braden Quade

Voting in any election gives you the opportunity to create positive change. Here are five reasons why you should vote in any election:

1. Actively voting protects your voter rights.

When eligible voters exercise their right to vote, it defines the voices of a nation. By being involved and voting, the vote itself is shown to be intrinsic to society. If voters feel like their voices are being stunted and democracy is threatened, the voting population can use their votes to make their opinions heard.

2. Your daily life and your family's future are impacted.

Our collective votes will always generally impact our home life, our communities, and beyond. Though we may tend to think that we are untouchable or even unaidable, that's simply not the case. For underserved communities, becoming involved is more important now than ever. By voting and being civically engaged in our communities, we can make a profound difference to create permanent results.

3. One vote can decide it all.

A singular vote may not be crucial, but in reality, one vote has changed history many times. From presidential elections to House of Representative seats, every vote counts, indeed.

4. Decide on how your money is spent.

Paying taxes is a mandatory process. Everyone has the right to voice their opinion on what should be done with that money on the local, state, and federal levels and voting is the best way to declare that.

5. Be a voice for those who cannot vote.

Ever since voting became practiced in the U.S., there have been many hurdles for minority and disenfranchised groups in this country that have prevented them from voting fairly and freely. If you are an eligible voter, not only are you voting and expressing your own opinion, but you are also lending your voice to others who cannot articulate their beliefs on their own.

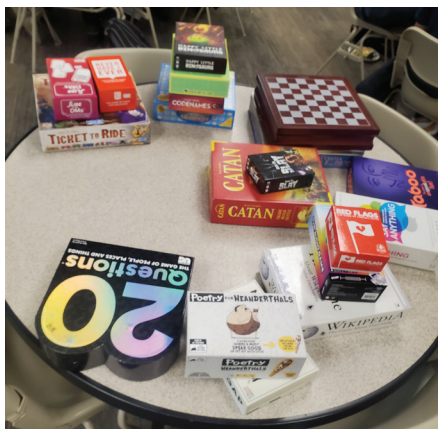
For more information on how to vote, visit vote.org

VOTER REGISTRATION

Mat-Su College student body Vice-President Ryan Newman took time to talk to students about voting and assist those interested in registering to vote. Those students who did not meet the deadline to become a registered votere for this upcomming election can still vote for President of the United States by showing up at the polls with a vadid state ID.

Let the Games Begin!

To build community for students, the Mat-Su College Gay-Straight Alliance (GSA) held a game night on Wednesday, September 26. They were joined by the Tabletop Gaming Club, whose members attended and brought even more board games. In total 19 students participated in the event.



MAKE A POSITIVE IMPACT IN YOUR COMMUNITY

Play an important role on the Mat-Su College Campus. Being on a committee can help to enhance your career, give you a chance to give back to your community, and give you the opportunity to challenge yourself by helping to shape your society.

Join a Mat-Su College Student Government Council Committee

Or join one of the student clubs.

Clubs are a great place to meet like minded people, have fun, learn new things and relax.

Table Top Gaming Club	Human Services
Gay Straight Alliance	Gamers Club
Math Club	Robotics Club
Nihongo Tadoku Club	Mat-Su Monitor
Veterinary Club	Bible Club

Joining a committee or club looks good on resumes as well as gives you a chance to connect with fellow students, staff and faculty. You owe it to yourself to try them out. If you don't see a club that interests you, can start one of your own. Student Government will fund you up to $300 to cover expenses. You can pick up a form at the Student Government office in JKB 114, near the café.

See **Food Boxes** page 1

In early March the project began to root. Eddie Ezelle, the then director of the MatSu Food Bank, offered to house and distribute foodstuff as the college had no room available. Tracy Kalytiak offered a grant opportunity from the Mat-Su Health Foundation to support the project. In April students, Tracy Kalytiak, and staff met at the MatSu Food Bank, got a tour, and discussed where and how food would be distributed. Throughout the summer several devoted, determined students and staff worked together with the food bank and the Mat-Su Health Foundation to make this dream a reality.

Fred Becker, the new Executive Director of the MatSu Food Bank, offered to provide the space necessary to build food boxes, and to order and store the many pallets of food. Working together with Audrey Badger and Darla Haddeland, Financial Aid Advisors at the Mat-Su College, Becker wrote the grant to fund the project.

Tracey Kalytiak, the Program Officer for the Mat-Su Health Foundation, was instrumental in successfully completing the grant process. The project was awarded $40,000 to cover start-up costs and support for our first year. The Student Supply Stop was off to a great start.

The plan was to have everything in place for the fall 2024 semester. Student government along with energetic staff and faculty, working with robotic precision, had a boxing party to put the food boxes together at the Wasilla Food Bank in early August. For our initial lift off we packaged 128 boxes!

Student representatives here on campus felt that having food here alleviates students concerns for meals during class hours. Here are several quotes from Student Government representatives:

"We know that food insecurities and hunger in general make it difficult to concentrate on class work."

"We care for our students. It gives them more of an opportunity to work on their educational journey."

"College is expensive enough and the extra food would really make them feel better. It gives them more opportunities to continue going to school and not having to worry so much about not spending more time at work."

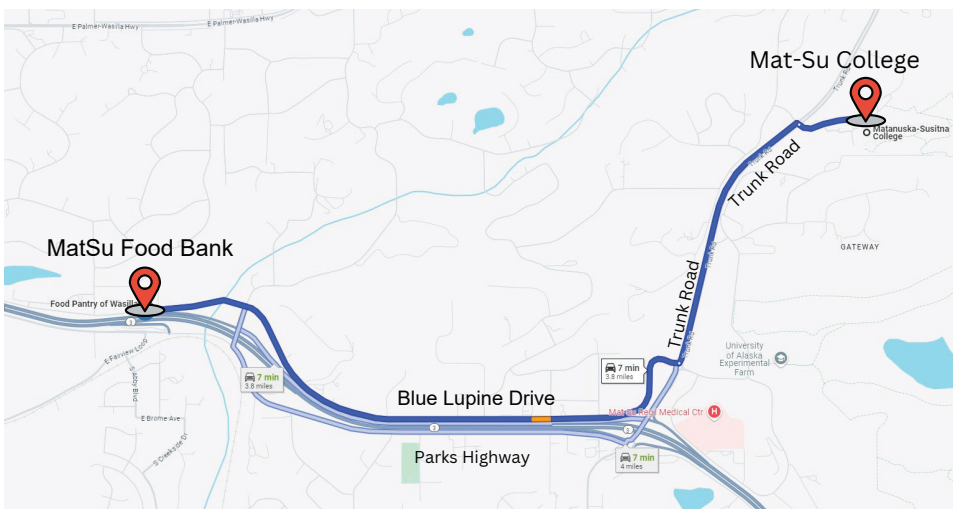
"Having the connection with the food back opens the door to more opportunities of support."

The campus community as a whole will greatly benefit from our food pantry, The Student Supply Stop. It will provide a much-needed buffer for those who don't have the money to purchase food after work or at school, easing the financial burden brought on by growing college and living expenses.

With the assistance of the Mat-Su Health Foundation and the Wasilla Food Bank, providing an on-campus food pantry is an attainable approach to increase students' access to food. There are so many statistics out there showing the disparity of students with food insecurities dropping out, especially first-generation students. One study by Public Health Nutrition found that food-insecure students are 42% less likely to graduate.

Mat-Su College students can go to the MatSu Food Bank located at 5099 East Blue Lupine Drive, Wasilla (just 3 miles from the college) from 10:00am to 1:00 pm on weekdays. By showing their student ID they can receive a food box. Boxes contain a variety of staples including rice, fruit, vegetables and easy to prepare meals. Students will also have an opportunity to receive other resources available through the MatSu Food Bank if they choose.

A limited selection of ready-to-eat snacks will be available on campus for students who need a quick energy boost while studying. Some toiletries will be available on campus, in containers found in the restrooms.



MatSu Food Bank 5099 Blue Lupine Drive
3 miles / 5 minuts from the college

Mat Su College Hall-O-Ween Party

By Braden Quade

Join the spooktacular fun on October 31st at Mat-Su College! Kids and adults are invited to Trick or Treat at the department doors and vote for their favorite displays. Enjoy carnival games like cake walks, fishing games, ring toss, costume contests, and painting activities. Various departments participate, with robotics showcasing creepy moving displays and the library featuring spooky games. (The Glenn Massay Theater will show a spooky movie for the kids that are too old for games and candy.) Mat-Su College is the perfect place for indoor trick-or-treating with games and prizes! MSC students and their families are all welcome to join in the Halloween festivities!

The spooktacular Hall-O-Ween party will happen on Thursday, October 31st, from 3pm to 6pm.

An Interview with an Astronaut: Katya Echazarreta

By Justice A. Darby

A former NASA engineer having worked on missions like the Europa Clipper and the Perseverance rover, Katya Echazarreta, in 2022, became the first Mexican-born person in history to go into space. Going aboard a Blue Origin New Shepard, she and five other crewmates blasted off above the Karman line as a part of the first mission for Space for Humanity to study the overview effect on people. Since the mission, she has founded Fundación Espacia, a non-profit organization aimed at promoting space and STEM to women, children, and younger generations in Mexico and very likely expanding abroad.

Justice Darby: Before your flight into space in June of 2022, what motivated you to apply for the Space for Humanities astronaut program?

Katya Echazarreta: So, it was interesting because when I applied it was back in 2019. It was after a process of three years, and in 2019, just to give a little bit of context, comes before the first crewed mission back to space from U.S. soil which happened in 2020. So, at that time, I saw this application and of course, I was excited to see the way the space industry was developing, but nothing has really happened yet. That first mission hasn't really been a success yet, and so I don't really have much of an idea what the country is going to look like, I just know that this organization is proposing something really interesting, and I don't really lose anything by simply throwing my name in, and you know, as things progress, we'll see what happens.

So, that first application more than anything in my eyes was a way for me to prepare for future applications because I've always known that I wanted to be some sort of space program. So I kinda looked at it as my first of many, but it ended up being my first real mission.

Justice Darby: Fair, it's also the same sort of stuff for me. Just a spur of the moment, never knowing where it will lead you.

Katya Echazarreta: Exactly!

Justice Darby: Since the founding of the Fundación Espacial, I hope I didn't butcher that, how has your organization's message changed, and how has it changed you?

Katya Echazarreta: I think initially the biggest goal for the organization was to create opportunities relating to the space industry, first into Mexico, and then as time started to progress and as we started to realize how many people were actually interested in this from all over the world, we started opening this up internationally for the rest of Latin America. And now, as we are seeing how many people are interested and how many other countries that are not necessarily the countries that have access to these types of space opportunities, but also may not necessarily be Spanish speaking have also become interested, we're starting to try to come up with ways of how we can expand into other countries, into other lan-

See **ASTRONAUT** *page 11*

Right: Katya Echazarreta
Left: Governor Michael Dunleavy

Miniature Art
Holiday Sales
Event
Faculty, Staff and Students are invited to participate in the holiday sales event! All work must be 16 inches or less in size to be accepted. 30% of proceeds go towards the Art department to purchase equipment.
December 6th| 4:00 PM – 6:00 PM
FSM 200 | 8295 E. College Drive Palmer, AK 99645
Any medium
Work must be ready to hang
Name tags will be filled in during drop off
Mat-Su College
University of Alaska Anchorage

Mat-Su Monitor
October 2024

Mary Croxton Art Show

This event celebrated the life and legacy of an artist who not only enriched our community with her talent but also generously donated her art equipment to the Mat-Su College Art Department.

On Friday, September 13th 62 original watercolor paintings and prints, each a unique representation of her vibrant spirit and creative vision were on display. These works were available for purchase at various price points, offering something for every art lover or collector.

This exhibition provided a rare opportunity to acquire beautiful local art while supporting our students and future artists. Thirty percent of the proceeds will go toward purchasing new easels and tables for our art room, enhancing our Drawing and Painting programs and continuing the artist's legacy of nurturing creative growth in our community.

Art plays a vital role in inspiring reflection, fostering creativity, and connecting us to the world in deeply meaningful ways. By attending this event, not only viewers experience the beauty of a life dedicated to art, but also contribute to the ongoing cultivation of artistic talent and community gatherings at Mat-Su College.

A total of 22 pieces were sold over the two week exhibit. Total sales were $4,003. Mat-Su College's Fine art Department portion was (30%) is $1,200.90!

St. John Lutheran Church and Mat-Su Senior Center/Palmer Senior Citizens Center will each receive $1,401.05.

MAT-SU MIDDLE COLLEGE
NOW ACCEPTING APPLICATIONS
GRADUATE HIGH SCHOOL WITH UP TO 60 CREDITS!
Priority application period: January 4TH - March 5TH
Family Information Night Webinar posted at https://www.matsuk12.us/domain/6968
Go to matsuk12.us/msm for more information!
MSMCS
MATANUSKA-SUSITNA BOROUGH SCHOOL DISTRICT
or 907.761.3495
907.761.3498
MSM@matsuk12.us
www.matsuk12.us/msm

See *Hitchcock* page 1

J.H. : I taught that class for over 30 years, at both UAA and then the Mat-Su Community College, as an adjunct. I built several cabins for both campuses: I built the Mat-Su College cabin at the Alaska State Fair, and I built two large cabins at UAA, one of which became the Native Welcome Center. It isn't there anymore though.

Monitor: That is sad! How did you build the Mat-Su college cabin, and how long did it take?

J.H. : Ten students and I built it. We built it solely on weekends and finished it in 1982. We built it out of local wood from the area.

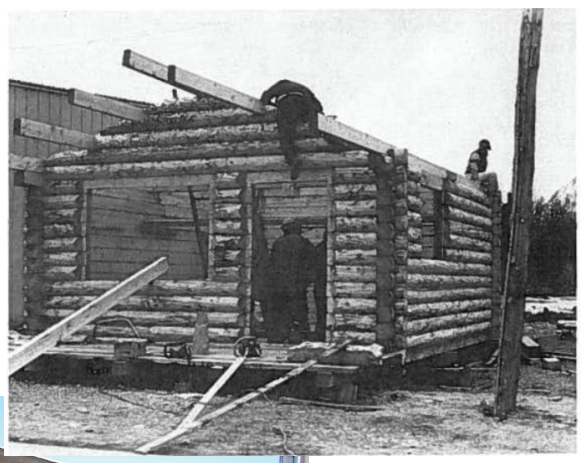
Monitor: Besides the Mat-Su cabin at the Alaska State Fair, and the two cabins at UAA what other cabins did you build?

J.H. : I built several cabins at the Alaska State Fair. I built the six log cabin food stands near the rides, and another log cabin at the north entrance to the fair. There was a time when a new fair manager came into the position, and wanted to update the fair by getting rid of these log cabin food stands. The people who went to the fair and liked the log cabin food stands got upset and refused to let the fair manager do such a thing! [laughs]

Monitor: It is good to know the community has your back! Those log cabin food stands have some of my favorite food items in the entire fair. How did you learn how to make log cabins in the first place?

J.H. : My family were homesteaders, and in 1943, moved to Alaska. My dad was a cabin builder, and I helped him ever since I was ten years old. In 1957, my dad passed away while building a log cabin for the Girl Scouts. After I got out of the Army, by 1960, I finished the Girl Scouts cabin by dad had started. I also took on a partner who helped me draw up the floor plans. That was the first log cabin I ever built. The last log cabin I ever built, or ever will build, is my own house. It is almost finished!

Monitor: How amazing it must be to say that you have built your own house! Thank you so much for your time, Mr. Hitchcock.



Cabin at the Alaska State Fair built in 1982 by Jim Hitchcock's 1982 Cabin Building Class

Alaska Wilderness Studies (AWS) 190: 3 Credits

Hands-on techniques and skills of log cabin construction. Covers planning and organization, estimating costs, and major phases of log building construction including foundation, floor, walls, roof and windows, doors and trim.

MSC Catalog Entry

See *Ornaments* page 1

This will be the second time Alaska has provided the tree for the U.S. Capitol Building, the first time being from the Chugach National Forest in 2015. This year, the tree is coming from Alaska's largest national forest, the Tongass National Forest. "It's an honor to have the 2024 U.S. Capitol tree come from Alaska," said Alaska Governor Mike Dunleavy. "With over 22 million acres of pristine wilderness, Alaska's forests not only symbolize the grandeur of our nation but also embody the spirit of resilience and unity. As we prepare to share a piece of Alaska with the nation, I want to acknowledge Alaska's National Forests team for their tireless work. Congratulations to everyone involved."

Not only is Alaska providing the tree, but earlier this year, staff and faculty members of Mat-Su College helped craft ornaments for the 48 indoor trees of the Capitol Building. The crafting project happened during one of our personal development sessions for Convocation (a start-of-the-year event). We were able to create designs from the Alaska flag to the northern lights and Paper forget-me-not flowers to wooden Alaskan animals. We have made over 256 ornaments. to take to the Forest Service in Anchorage.

This is truly a proud and exciting time for the Mat-Su College, showing our support and putting the energy towards this shows the teamwork and strength we have as a college.

Monitor

MEETING TIMES
Wednesdays
2:30 - 3:30
OLB 214

Looking For
- Photographers
- Writers
- Reporters
- Marketing Reps
- Cartoonists
- Artists

Now taking submissions:
Next deadline for entries:
October 30

Math Club

"We may not be private eyes, but we can find your X"

MSC SGC

GET INVOLVED WITH YOUR
STUDENT GOVERNMENT
Meetings Mondays
11-12 FSM 106

Health & Human Services Club

The information gateway between community help organizations and the Mat-Su College student body.

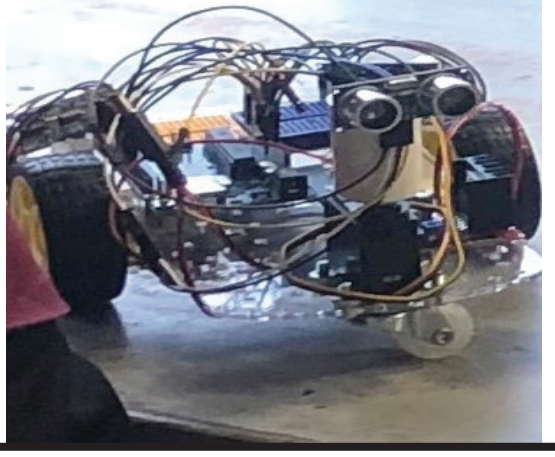
Meeting Times TBA

Contact Dave Evans at dtevans6@alaska.edu

Robotics Club

Monday - Wednesday

11:30 AM to 3:30 PM JKB 120.



Mat-Su College
University of Alaska Anchorage

MSC Gay Straight Alliance
LGBTQIA+ Student Club

YOU ARE WELCOME HERE

LGBTQIA+ / Gay-Straight Alliance Club Meetings:

Wednesdays	2:30 – 3:30	FSM 106

Advisor: K. Joey Pavia-Jones
kpavia@alaska.edu
Mat-Su College Student Club: Gay Straight Alliance

BIBLE CLUB

When: Tuesdays 3:00-4:00

Where: FSM 106

Gaming Club

When: Wednesdays Where: TBD

TABLETOP GAMING CLUB

WHEN: Wednesdays 2:30 - 4:45

WHERE: SNOD 117

YOUR CLUB'S AD COULD BE HERE!

Mat-Su College / UAA Multicultural Student Services

JOIN THE JEDI ALLIANCE

The JEDI Alliance is a group of student leaders and advocates dedicated to advancing **Justice**, **Equity**, **Diversity**, and **Inclusion** at Mat-Su / UAA. Become an advocate!

Apply Now To Join

- Join a committee focused on awareness, outreach, and adventures!
- Advance belonging and inclusion at Mat-Su!
- Get involved and share your voice!
- Scholarships available!

Questions? Contact Dr. Jennifer Bernard at jdbernard@alaska.edu

See ***Jiu-Jitsu*** page 1

the same weekend that ADCC (the biggest BJJ tournament) took place -- and CJI aimed to blow it out of the water. It sounds insane, but that's precisely what happened on August 16-17th, when the most significant and entertaining grappling tournament in recent memory occurred. It was a truly great day for the world of submission grappling, but what made this tournament unique and different from those that came before it? And what is CJI?

The Craig Jones Invitational is named after its founder, Craig Jones, a BJJ athlete hailing from Australia, who is widely considered the number two submission grappler alive. CJI was his brainchild and was a two-night submission grappling tournament that aimed to gather the greatest grapplers in the world and create the most extraordinary grappling event ever. (I would say they succeeded.) It would all begin when Craig Jones appeared on the Joe Rogan Podcast announcing the tournament, showing off two million dollars in briefcases that would be offered as grand prizes. The tournament was separated into two weight classes, those above and under 80kg. All tournament participants were male (excluding those in the superfights). The tournament also implemented a revolutionary new competition style, using slanted walls around the mats meant to stop participants from being shoved off the mats, preventing breaks in the action and keeping participants from stalling.

Tournament participants were poached from the ADCC world tournament the same weekend by offering 10,001 dollars just for participating, with a million dollars grand prize per weight division. In comparison, ADCC, the biggest grappling BJJ tournament that happens every other year, only pays out 10,000 dollars to whoever wins their weight division. In other words, your reward for being the best submission grappler in the world in your weight class was 10,000 dollars every two years. CJI was also streamed for free on YouTube with high-quality production, in contrast to ADCC, which is streamed behind a paywall on FloGrappling.com and at subpar quality. The choice was relatively easy when the athletes and the audience were forced to choose between the tournaments.

The stakes

Plenty was on the line: money, reputation, personal pride, and an athlete's record. And that's what made the atmosphere so electrifying. Every athlete was taking a risk being here; they had risked ruining their reputation with ADCC, which is essentially the Olympics of the submission grappling world. They took the chance to withdraw from the far more established ADCC world tournament and instead threw their name in the hat for CJI. As can be inferred from what was stated earlier, BJJ athletes aren't the most well-compensated athletes. If anything, they're paid pretty poorly, something that tends to apply to all combat sports (excluding mixed martial arts and boxing). So a 1,000,000 dollar cash prize wasn't just enticing, it was irresistible. That is quite literally four times the 213,000 that ADCC pays out TOTAL in cash prizes to their winners. This is a life-changing amount for anybody, and this cash prize has never been offered in BJJ's history. It is safe to say every single participant could feel the pressure to perform, setting their sights firmly on the grand prize.

Kade Rutolo vs Andrew Tackett

Possibly the most entertaining BJJ match ever, this had everything you needed from a game between two top young grapplers. Gritty Jiu-Jitsu, big throws, close submission attempts, explosive wrestling, and the fabled split decision to certify how closely matched these two were. Before the semi-final match in the under 80kg division, Kade was the favorite going into the match, being a highly touted prodigy. Still, Tackett continuously proved himself on a high level, putting on a gritty performance and beating all his opponents in an entertaining style. So when the two met on the mat, it was nothing but fireworks. Both Tackett and Kade were known for pushing the pace of their matches, and the result was fast-paced, constant action. At the end of the tournament, both athletes went home happy. Tackett was given a 20,000-dollar bonus for being the most entertaining grappler in his bracket. Kade would win the tournament for under 80kg and go home 1,000,000 dollars richer.

What this means for the sport

BJJ is a massively popular global martial art that needs a stronger market appeal regarding broadcasting entertainment value. There are some inherent reasons why BJJ has struggled to break into mainstream martial arts entertainment. For example, someone without grappling knowledge would be hard-pressed to understand what is going on and who is winning. Sometimes, it can just be boring. Athletes may just sit in a position when they are ahead on points and wait out the win, which leads to low entertainment value. The low pay turns off many prospective and talented practitioners from considering a career in the sport since unless you're Gordon Ryan (the GOAT of submission grappling) or Craig Jones, you would be lucky to break four digits. However, CJI solved all of these, at least partially. They introduced an easy-to-understand scoring system by announcing the winner of a round in between the rounds using the 10-point boxing system. They added bonuses for entertaining competitors, implemented slanted walls to avoid competitors shoving each other off the mats to reset, and had referees stand the athletes up when the action had stalled. The pay increased drastically for all athletes, and every competitor who participated went home richer than they would have if they opted to attend ADCC. The fans enjoyed a high-quality, entertaining grappling event streamed for free on YouTube. Overall, it pushed the envelope on what a grappling event is and set a new gold standard for what grappling competitions should aspire to be, showing a more prosperous BJJ for both the competitors and the audience.

Rocket Science: Shockwaves

By Justice A. Darby

Shock Waves: An Intermolecular Traffic Jam

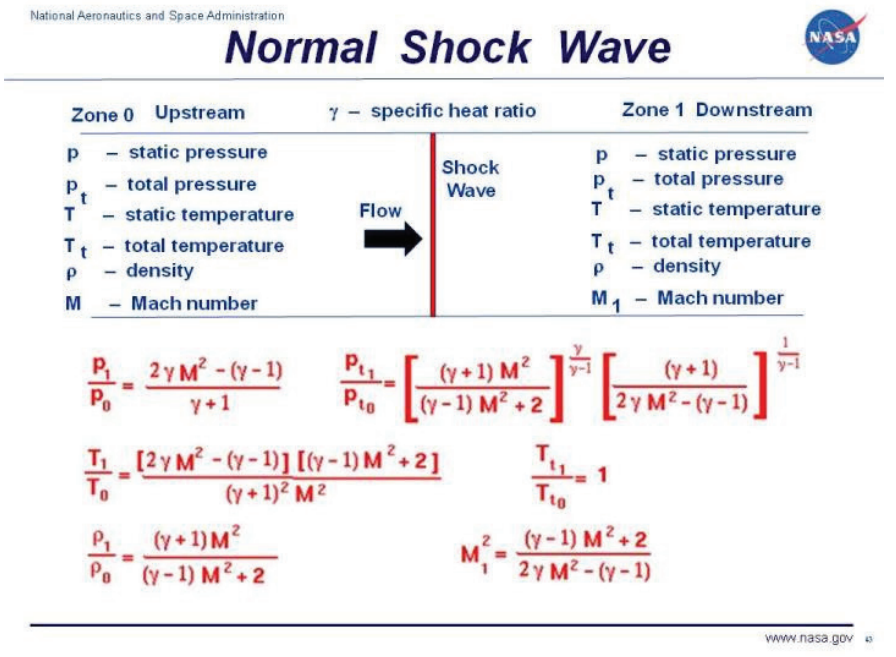
Of all the things in compressible flow, one of the most complex topics to learn about and understand is shock waves. This should come as no surprise considering that shock waves have much more going on near the molecular level that influence their formation. Zooming into a shock wave near the molecular level reveals a near-instantaneous effect where molecules that were once going at supersonic velocities have suddenly lost a lot of velocity and go subsonic. In turn, the static gas density, static pressure, and static temperature nearly instantaneously increase while the total pressure decreases. In a shock wave, the energy across the shock is conserved and thus the total temperature remains constant, but due to a decrease in the total pressure, the entropy in the flow increases.

Shock waves occur mainly when an object begins to move faster than its local speed of sound and the flow area decreases suddenly. This causes the gas molecules to bunch up in a thin boundary where the molecules can't move out of the way fast enough, causing them to ram into each other. In effect, shock waves are the molecular equivalent of a traffic jam with the speed limit being the speed of sound.

There are also other types of shock waves. One of the simplest ones is the aptly named normal shock waves.

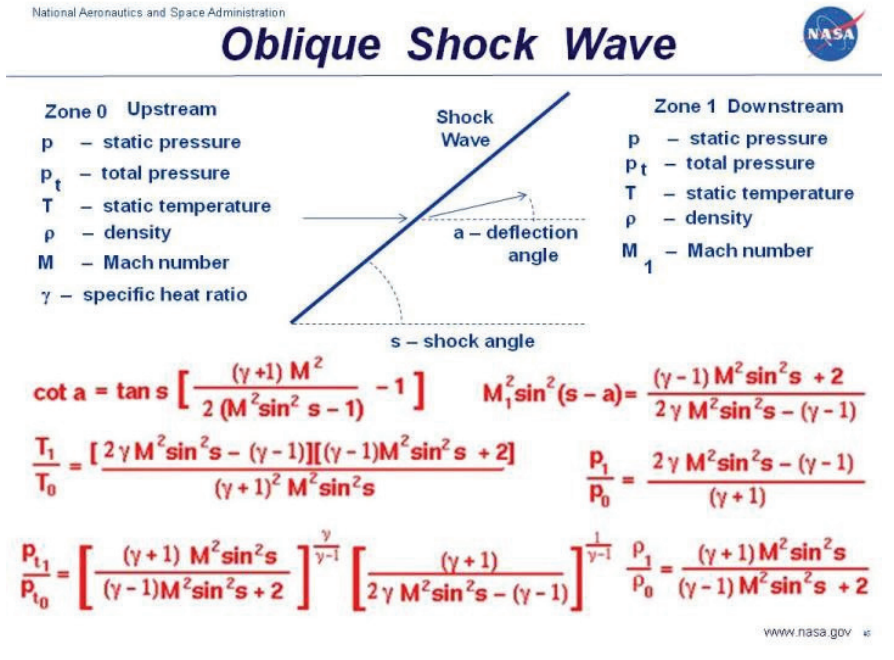
Different Shock Waves and Their Equations

Unsurprisingly, there are many different types of shock waves, but only three types will be covered. To start, amongst the simplest of all the shock waves are the aptly named normal shock waves. Normal shock waves occur perpendicular and stay attached to the surface the shock travels across. In terms of theory, while NASA may consider these equations to be "rather simple algebraic equations", it can still safely be said by most people that even the simplest of these theories look like mathematical nightmares.



A step higher than normal shock waves are detached normal shock waves. The only difference between normal shock waves and detached shock waves is that the normal shock wave is no longer attached to the surface the shock wave was on. However, detached normal shock waves function under the same general theory as normal shock waves and use the same equations as normal shock.

The last type of shock wave to be discussed will be oblique shock waves. They function like a normal shock wave, but the difference is that the shock wave is no longer perpendicular to the surface it is traveling on, and it is, instead, angled. This takes the already somewhat messy normal shock equations and adds a bit of an angled element that makes it look even worse.


National Aeronautics and Space Administration
Oblique Shock Wave
Zone 0 Upstream
p – static pressure
p_t – total pressure
T – static temperature
ρ – density
M – Mach number
γ – specific heat ratio
Shock Wave
a – deflection angle
s – shock angle
Zone 1 Downstream
p – static pressure
p_t – total pressure
T – static temperature
ρ – density
M_1 – Mach number
cot a = tan s [((γ+1)M²)/(2(M²sin²s - 1)) - 1]
M1²sin²(s - a) = ((γ-1)M²sin²s + 2)/(2γM²sin²s - (γ-1))
T1/T0 = [(2γM²sin²s - (γ-1))((γ-1)M²sin²s + 2)]/((γ+1)²M²sin²s)
P1/P0 = (2γM²sin²s - (γ-1))/(γ+1)
Pt1/Pt0 = [((γ+1)M²sin²s)/((γ-1)M²sin²s + 2)]^(γ/(γ-1)) [(γ+1)/(2γM²sin²s - (γ-1))]^(1/(γ-1))
ρ1/ρ0 = ((γ+1)M²sin²s)/((γ-1)M²sin²s + 2)
www.nasa.gov

See **SHOCKWAVES** *page 11*

Welcome to Ask Sophia, the Mat-Su Monitor's regular advice column. If you have a question you'd like to see answered, submit it anonymous at https://matsu.alaska.edu/monitor or in the Ask Sophia box in the FSM front lobby.

Q. Dear Sophia: Is this a vent to the void? are you responding somewhere? or do you just want the drama?"

A. Dear Friend: Bring it on…

Q. Dear Sophia: I miss someone important to be me. It's been 3 years now. It will be 4 years when I see him again. I need to get out more. I need to work more. I need to drive more. I need to do more. I am not interesting enough.

A. Dear Friend: You need to give yourself a break. Missing someone is a sign you care about them, which is perfectly normal. Accept your feelings, it is okay to miss them. It is a good idea to find healthy outlets to express those feelings. Staying connected through communication, journaling, and actively engaging in activities to keep yourself busy and fulfilled during their absence may ease your time apart. Talking to someone can also ease the wait. Lean on your support network of friends and family. Talk to an advisor or mentor. Mat-Su College students have access to free counseling sessions, you can call 907-352-3252 to set up an appointment.

Q. Dear Sophia: Why don't my parents love me? :(

A. Dear Friend: There are many reasons why a child may feel unloved by their parents, and it is more common than you might think. Parents may be frustrated, stressed, or unable to regulate their emotions. Parents may not see their children as separate individuals, but rather as extensions of their own egos. Parents may criticize their children in order to motivate them to perform better, but this can often make children feel worse about themselves. Some parents are incapable of loving anyone—including themselves. Dragon parents have been known to EAT their children… just sayin'

For reals, feeling unloved as a child can have long-lasting effects, such as developing an insecure attachment style – you don't want that. Keep talking to your friends and other family members regularly, go spend time with them whenever possible, and be open to meeting new friends and trustworthy adults. Not every adult or loved one will end up treating you like your parents do. Don't be afraid to give others a chance to love you.

Q. Dear Sophia: is it okay to get a bat to eat the ladybugs that have infested my office? and what eats bats?

A. Dear Friend: Hmmm. Well… first off bats don't eat lady bugs though they are insectivores that eat mosquitoes, moths, beetles, crickets and leafhoppers as these critters fly around at night. Ladybugs generally do not. Secondly, bats are prey to owls, hawks, house cats, raccoons, foxes, snakes, frogs, alligators, weasels and mink, spiders and centipedes none of which I imagine your other office mates would appreciate having around.

Ladybugs are gentle harmless creatures you can carefully pick them up and take them back outside.

OUT OF THE BLUE

C	A	V	E	R	P	B	S	U	E	M	A	E	R	O
N	B	R	U	E	E	A	K	L	T	I	Q	X	A	E
R	C	D	E	W	R	B	Y	T	R	L	U	A	R	N
E	D	E	N	O	I	Y	G	R	E	U	A	U	T	O
Y	M	N	A	L	W	E	G	A	D	Z	Z	B	H	T
A	A	I	V	F	I	C	E	M	W	A	E	L	O	S
B	Y	M	Y	N	N	I	N	A	O	L	U	U	N	C
L	A	Y	O	R	K	L	I	R	P	S	N	S	A	E
C	R	A	Y	O	L	A	B	I	N	I	A	T	V	R
I	G	E	I	C	E	E	O	N	X	P	Y	E	A	U
F	S	S	N	A	I	S	R	E	P	A	C	R	L	L
I	L	L	D	P	N	P	E	H	C	L	T	I	E	E
C	A	E	I	R	I	A	I	H	P	O	S	N	U	A
A	T	H	G	I	L	R	D	E	L	F	T	G	R	N
P	E	C	O	E	E	S	I	O	U	Q	R	U	T	D

Circle the words from the list below. Place the leftover letters in the spaces for a special message!

AERO
ALICE
AQUA
AZURE
AXE
BABY
BAYERN
BLUSTERING
CAPRI
CAVE
CERULEAN
CHELSEA
COBALT
CORNFLOWER
CRAYOLA
CYAN
DELFT
DENIM
GRAY
ICE
INDIGO
LAPIS LAZULIS
MAYA
NAVAL
NAVY
NILE
PACIFIC
PERIWINKLE
PERSIAN
POWDER
ROBIN EGG
ROYAL
RUDDY
SAPPHIRE
SKY
SLATE
SOPHIA
STONE
TRUE
TURQUOISE
ULTRAMARINE

Here's an example of how it works: A R C T I C D R A G O N

is B S D U J D E S B H P O

One letter stands for another. In this example the letter B stands for the letter A so all the Bs stand for the letter A, Ds stand for C, etc. Single letters, apostrophes, and word length are all clues. The code letters are different for every puzzle.

P I B Y I D N V I A S R R I Y W D N I M P L F W D S R R I Y W F Y

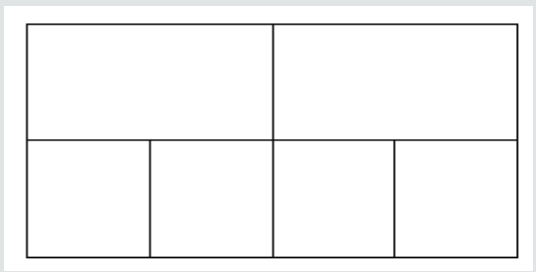
B H B T B Z H R L N Z V N R N M W F Y I X I Y - Q B Y D

M B K B Z

HINT: A = B and P = W

IMPOSSIBLE PUZZLE

Draw through each line in the picture only once without lifting your pencil.



This is an unusual paragraph. I'm curious as to just how quickly you can find out what is so unusual about it. It looks so ordinary and plain that you would think nothing was wrong with it, In fact, nothing is wrong with it! It is highly unusual though, Study it and think about it, but you still may not find anything odd. But if you work at it a bit, you might find out, Try to do so without a hint!

SUDOKU

Fill the grid with numbers so that each row, column and 3 x 3 section contains all of the digits 1 through 9.

					8	3	5	4
7			6		2	8	1	
			9			7		2
	5	8	7		4			
4	3	2	5	1		6	7	8
	1				6			5
8	6			3				
3				9	5	1	2	
		9			7		8	

New atoms frequently lose electrons when they fail to keep an ion them.

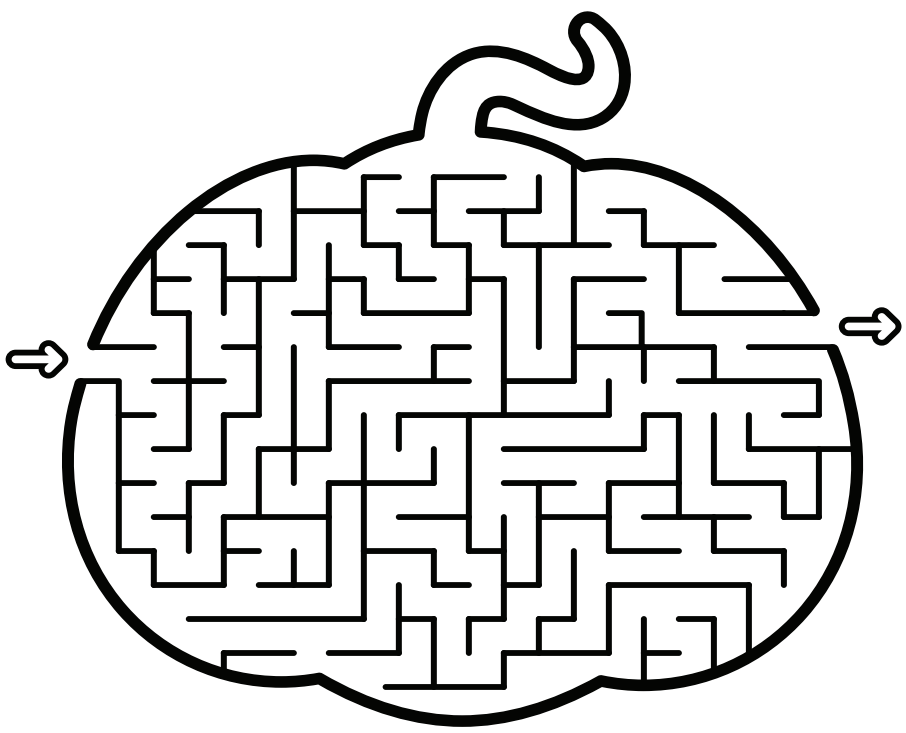
Last time I got caught stealing a calendar I got twelve months.

What do you call a laughing motorcycle?
A Yamahahahaha

A hole was discovered in the fence that surrounds the nudist camp. Authorities are looking into it.

The teacher had to confiscate a rubberband in her algebra class because it was a weapon of math disruption.

Unusual paragraph hint:
Consider the lipogram *Gatsby*, a 50,000-word novel written in 1939 by Ernest Vincent Wright without the letter E.



See ***Summit*** page 1

two miles, crossing several mellow streams and leading into a higher area of tundra full of blueberry bushes and ground squirrels. Here my friends and I found it to be a perfect place to take a break on a mossy knoll, drink some water, and eat lunch, and one of us even took a short nap.

Next, you cross a picnic table, and a larger stream, and from there on it is all up…literally all up. The incline is steep before mellowing out to a ridge that seemingly leads to the ridge that will lead you to the summit. Do not be fooled, keep left as that is the easiest path and where you will find the trail to be. Veering to the right as what seems best (and is what my friends and I chose) only leads you off course and makes the climb harder. It was not until descending that we realized the trail coming up on the left would have been way easier, but as we all know, hindsight is twenty-twenty. Next is steep shale climbing where trekking poles become very helpful in not sliding down. After the shale climb is a boulder scramble for about a mile- the most arduous part of the climb where you will find yourself wondering if summiting is truly worth it. Trust me it is, do not give up and you will be rewarded. The summit is marked by a single metal pole. Not long after reaching the summit, I was rewarded with the beautiful sight of watching lightning strike in the valley below. It was truly a wondrous sight and a bone-chilling experience once the metal pole beside me started making buzzing sounds- I can safely say that I have never moved so fast in my life.

All and all Matanuska peak is a worthwhile hike. I think summiting it once is enough for me, and on future hikes, I will stick to hiking to the shale and back and simply enjoying the beauty of the valley.

See ***Astronaut*** page 5

guages, because we have seen a lot of interest from Asia for example and they told us "We would love to have something like this and participate. We don't speak Spanish, but is there something that we can do?" so I think that's a big goal for us at the moment is expanding into other territories and other languages. And personally, I think it has given me just a lot of bravery and courage because doing something like this, creating and designing a program like this, is very complicated, and the way that we have been able to successfully do it and run it I think has been really eye-opening about possibilities of how many things we can actually do if we dare.

Justice Darby: Have you ever thought about expanding into Africa before?

Katya Echazarreta: Yes! I mean that's definitely a big place where we've had some interest with a lot of messages. There are already currently some programs that are starting to also start up and develop within Africa that we would love to get in touch with and see how we can collaborate.

Justice Darby: Having worked previously at NASA's JPL (Jet Propulsion Laboratory) and NASA missions like the Europa Clipper and the Perseverance rover, how hard was it for you to apply and adapt what you had learned in school to these various missions?

Katya Echazarreta: Within NASA?

Justice Darby: Yeah.

Katya Echazarreta: So that's a very interesting question because when you are a student and you're studying engineering, you always have this doubt and question in your mind of "Am I actually going to be able to transfer the theoretical knowledge into the real life and real life works such as designing spacecraft?" and I think there's a big misconception as well when it comes to the engineering world of people thinking that in order to be a part of a certain industry you need to take classes at college to learn how to design for certain industries. That really doesn't exist. So you learn the basics, you learn the theory, and then once you join the industry there is where they teach how to apply for their particular needs and a lot of this knowledge is knowledge they have developed and accumulated over the years. And so I think the biggest thing that I've learned is you don't need to know everything, you need to know how to learn.

Justice Darby: Fair enough. What do you now see as a way forward for your effort with Fundación Espacial and in STEM?

Katya Echazarreta: I think that a really big factor that we have really started to consider is recognizing that so many people use STEM as something that is one, very difficult, and two, you need to be naturally talented and born with that talent in order to get into these fields. And I think that is a big misconception that we really try to battle and fight against every single day with this organization because, as I have learned with my work at NASA, yes, I mean, the people that I have worked with have been extremely intelligent, but I wouldn't say that any of the people that I have met all my life have been naturally born in that way. People find what they love and what they like and they work on it and that's how you are able to get better and to improve your skills. So that is a really important factor that we really want to instill on all of our students that it doesn't matter if you are not good in this moment, what matters is that you like it and that you love it and that you're passionate about it and that you are willing to put in the work that it requires and have to be afraid of the work hard. Yes, it's hard, there's nothing wrong with that, you can like the fact that it's hard. You can learn to love and accept the challenge, and I think that's just going to continue to fuel us to keep breaking these barriers and innovating. I mean, at the end of the day, I don't think it's a secret that launching things out into space is very, very difficult, but that's why we do it.

Justice Darby: Okay, last one, and this is a serious one from some of the goofballs I know from NASA, what is your favorite Latin American food dish?

Katya Echazarreta: My favorite Latin American food dish… That's a very good question… I would probably say pozole.

Justice Darby: What?

Katya Echazarreta: Pozole. It's p-o-z-o-l-e. It's a soup. They actually sell some here (at the Chepo's in Wasilla). You can try it.

Justice Darby: Well, I'll have to make it myself. Well thank you very much for the interview and congratulations on the baby.

Katya Echazarreta: Thank you!

See **ROCK ON** *page 1*

controllers. The experiment canister was then installed on one of NASA's sounding rockets, a Terrier-Improved Orion, were it was then launched on the morning of June 21, 2024 into space on a suborbital flight.

The Terrier-Improved Orion launching the RockOn experiments

The teams of the RockOn program were then given tours of Wallops Flight Facility, seeing the Mission Control, the rocket production and fabrication shop, and the high altitude balloon facility. After the rocket was retrieved, the experiments were disintegrated from the rocket and their canisters where the data from launch was extracted and analyzed. Afterward, the teams of the RockSat program held a celebratory dinner in the local firehouse in Chincoteague, Virginia. Accolades and awards were given out to the staff and faculty within NASA and partnered institutes in getting the RockSat program off the ground for 2024.

Chincoteague and the Beaches of Assateague Island

The beaches of Assateague Island during sunset

In the evening, after having finished our work at Wallops Flight Facility, many teams would go back to the place they stayed at in Chincoteague, Virginia. Here, teams could be seen wandering around the small town, eating at the local diners and restaurants. In their off time, many could be seen wandering around the forest trails of the nearby Assateague Island, soaking in the continuous sun in 85 degree weather. Commonly, they more often would go to the nearby beaches of Assateague Island, swimming in the Atlantic waters of the east coast and collecting sea shells.

Concluding Remarks

For me, even if the events that took place at Wallops Flight Facility only lasted 10 days, my time there will consequently be one of the most memorable times of my life. The experience of building an experiment canister that went on a rocket that launched into space has thus far been the defining moment for me for the year of 2024 and will likely not be outshined for a while. Even if it was a workshop at a NASA facility where a decent chunk of my time was spent building the experiment canister, the stay in Chincoteague, Virginia felt more like a vacation. With the amazing beaches and natural scenery, it is going to be an experience I will strive to chase again in the coming years.

See **Shock Waves** page 9

Shock Waves and Their Relation to Rockets

Unsurprisingly, shock waves happen to have an extreme influence on rockets. Since shock waves can turn a supersonic flow into a subsonic flow, the near-instantaneous effect of turning a very fast and accelerating flow in an engine into a slower flow has a huge effect on performance. Shock waves, at least in the diverging section of a rocket where the gas velocities are higher than sonic velocities typically, are usually looked out for and avoided. However, there are areas where shock waves can be utilized and exploited. Gas turbines have to run at subsonic conditions below the gas's speed of sound, and shock waves are introduced to reduce gas velocities to subsonic intentionally.

While this is not everything, there are likely several other places where shock waves appear that were not mentioned. However, for those who wish to understand shock waves and how the equations above are derived, a resource from the University of Texas will be left below describing the derivation of normal shock equations.

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